TECHNICAL CODE

All technical and specialized terminology employed herein is used in the manner prescribed by the Federal Communications Commission in its "Rules and Regulations" and in its "Standards of Good Engineering Practice"; no other definitions shall be construed to apply, and no other meaning shall be inferred.

Each Member which operates or participates in the operation of a system disseminating programs through the use of one or more carrier-current devices shall adhere to the following technical regulations and standards of good engineering practice:

a. No carrier frequency of less than 540 nor more than 700 kilocycles per second shall be employed in such a system, unless higher frequencies are approved by the Technical Manager. The carrier frequency shall be chosen to be an exact multiple of ten kilocycles per second.

b. No carrier frequency shall be employed within 10 kilocycles per second of the carrier frequency employed by any standard station whose 100 microvolt per meter contour encloses any part of the service area of the station or within 20 kilocycles per second of any station whose 500 microvolt per meter countour encloses any part of the service area of the station.

c. Radiation of the fundamental wave and all harmonic and spurious radiations shall not exceed 15 microvolts per meter at a distance of the wavelength divided by 2 pi from all conductors which make up the radio frequency transmission system.

d. Each system shall employ the following studio facilities:

1. Two or more independently attenuated microphone channels and microphones;

2. Two separately attenuated phonograph channels, or a single attenuated channel employing instantaneous switching between the two phonograph pickups;

3. One separately attenuated input for one or more remote lines, which may be combined by means of instantaneous switches with one phonograph channel, if two separately attenuated phonograph channels are provided;

4. Two 78 r.p.m. turntables and lateral pick-ups and one 33 1/3 r.p.m. turntable and lateral pickup; latter may be combined with one 78 r.p.m. unit;

5. Loudspeaker monitoring in all separate control rooms and earphone monitoring in all control locations;

6. Volume indicator on program output.

e. Each system shall meet the following standards of performance:

1. Transmitter modulation capability: 95% A.M.

2. Distortion introduced after microphone or phonograph input: less than 7.5% R.M.S. at 95% modulation measured at 1000 or 400 cycles per second.

3. Overall frequency response of system after microphone and phonograph inputs: flat within plus or minus 2 db or the 400 or 1000 cycle response from 100 to 5000 cycles per second.

4. Carrier frequency stability: plus or minus 50 cycles per second under all operating conditions.

5. Noise and hum introduced after microphone: 40 d.b. or more below 95% modulation.

f. Each member shall keep an operating log and record in it the following information on each transmitter operated:

1. The exact time and date the carrier and modulator are on and off.

2. The plate current of the final r.f. stage measured at weekly intervals.

3. The carrier frequency as measured at daily intervals if transmitter is self-excited and located at the station; or at weekly intervals if the transmitter is self-excited and remotely located; by a method approved by the Technical Manager.

4. Reasons for interruptions of service

5. Log shall be retained for a period of 2 years.